IN THE CLAIMS

1 (Previously Presented).   A method comprising:

partitioning a non-volatile storage media;

storing data in a first partitioned section of the non-volatile storage media;

storing, in a second partitioned section of the non-volatile storage media, metadata corresponding to the data stored in the first partitioned section of the non-volatile storage media; and

accessing the second partitioned section upon a system boot.

2 (Original).   The method of claim 1, wherein storing the metadata as packed metadata block.

3 (Original).   The method of claim 1, wherein the partitioning is logical.

4 (Original).   The method of claim 1, wherein storing cache data in the first partitioned section.

5 (Original).   The method of claim 4, further comprising:

updating the data and metadata atomically when a line of cache data in the first partitioned section is changed.

6 (Original).   The method of claim 1, further comprising:

allocating a portion of a mass storage device as the non-volatile storage media.

7 (Previously Presented).   A non-volatile memory comprising:

a first section to store data; and

a second section partitioned from the first section, the second section to store metadata for the data stored in the first section and wherein the second partitioned section is accessed upon a system boot.

8 (Original).   The memory of claim 7, wherein the second section is to store the metadata as packed metadata blocks.

9 (Original).   The memory of claim 7, wherein the partitioning of the first section and the second section is logical.

10 (Previously Presented).   The memory of claim 7, wherein the non-volatile memory is a portion of a mass storage device.

11 (Original). The memory of claim 10, wherein the mass storage device is one of a disk drive, a Flash memory, a ferroelectric random access memory, or a polymer ferroelectric random access memory.

12 (Original). The memory of claim 7, wherein the non-volatile memory is a cache memory.

13 (Currently Amended).   A system comprising:

a non-volatile storage media having a first section and a second section partitioned from the first section;

a memory control hub to cause the first section to store data and the second section to store metadata for the data stored in the first section; and

a processor coupled to the memory control hub <u>to access said second section on system boot</u>.

14 (Original). The system of claim 13, wherein second section is to store the metadata as packed metadata blocks.

15 (Original). The system of claim 13, wherein the partition is logical.

16 (Previously Presented).   The system of claim 15, further comprising a mass storage device and wherein a portion of the massive storage device is the non-volatile storage media.

17 (Original). The system of claim 13, wherein the non-volatile storage media is a cache memory.

Claims 18-21 (Canceled).

22 (Currently Amended).   A program loaded in a computer readable medium comprising:

a first group of computer instructions to logically partition a non-volatile storage media;

a second group of computer instructions to store data in a first partitioned section of the non-volatile storage media;

a third group of computer instructions to store metadata for the data in a second partitioned section of the non-volatile storage media; and

a fourth group of instructions to access the second partitioned <u>during</u> ~~in~~ a system boot.

23 (Original). The program of claim 22, wherein the second group of computer instructions include computer instructions to store the metadata as packed metadata blocks.

24 (Original). The program of claim 22, wherein the second group of computer instructions include computer instructions to store cache data as the data in the first partitioned section.

25 (Original). The program of claim 24, further comprising:

computer instructions to update the data and metadata atomically when a line of cache data in the first partitioned section is changed.

26 (Original). The program of claim 24, further comprising:

computer instructions to access a line of the second partitioned section to read metadata for the cache data in the first partitioned section.

27 (Previously Presented).   A program loaded in a computer readable medium comprising:

a first group of computer instructions to logically partition a non-volatile storage media;

a second group of computer instructions to store cache data in a first partitioned section of a non-volatile storage media;

a third group of computer instructions to store, in a second partitioned section of the non-volatile storage media, metadata corresponding to the cache data stored in the first partitioned section; and

a fourth group of instructions to access the second partitioned section to determine the state of the cache data in a system boot.

28 (Original). The program of claim 27, wherein the third group of computer instructions includes computer instructions to store the metadata as packed metadata blocks.

29 (Original). The program of claim 27, further comprising:

computer instructions to update the cache data and metadata atomically when a line of cache data in the first partitioned section is changed.

30 (Original). The program of claim 27, further comprising:

computer instructions to allocate a portion of a mass storage device as the non-volatile storage media.

Claims 31-44 (Canceled).